ALASKA SOLID WASTE NEWS

Fall Issue

Fall reminds us of the cycle of life.



Watching the Reindeer Herd After a Successful Corral
On Norton Sound

Hi everyone! Once again, this Fall we're looking at no snow across a lot of Alaska. Unlike last year, temperatures are warm, not cold. It is allowing a lot more work on construction and other projects - many of which had to start late this year due to the late snow. Living in rural Alaska villages means to always be prepared, and to be prepared even for times that give you more time to prepare! Now that barge season is gone for nearly all of us, are you looking for a project to start while waiting for more snow and a hard freeze-up? We hope this issue gives you some ideas. We

visit Huslia this month and see how they reduced their in-town burning successfully through starting a collection program. The fees they collect help to bring incentives for more folks to sign up. Putting off battery and e-waste recycling because you're not sure how to do the paperwork? Our resource circle invites you to check out our new film and guide to filling out shipping forms. Thinking of finally giving your recycling program a jumpstart? Read about our recycle bin factsheet. Have a project you'd like to start this January but don't have the

FALL 2013

Inside



When The Barge Comes In: Hooper Bay and Scammon welcome new equipment funded through two solid waste grants

2

In every issue



Village Spotlight: We visit Huslia and hear about how they rocked a collection program and drastically reduced in-town burning.



Resource Circle: Get out the popcorn and watch how to fill out shipping forms!

4



Culture Corner – In the month of drumming, looking to Yup'ik values and tradition

3



Calendar - See events and deadlines Nov - April.

C

time to do it yourself? There is still time to get someone in your community to apply for RAVEN Americorps. And our newest staff member, Evelyn Agnus researches how and why Yup'ik tradition happens, and notes how this knowledge can be applied to starting safer solid waste habits at home and in the community. Zender staff wishes everyone a good Fall Season and we hope to see you all at "the Jam Jam" at ATCEM 2013 (see page 2)!

Two Villages Welcome a Late Summer Barge: RurAL CAP and USDA Awards Come Through.

Hooper Bay was awarded a grant to start a community trash collection program from RurALCAP's new Solid Waste Management grant program for YK Delta villages.



Trash bins on their way from Tok

Hooper Bay purchased 7 trash bins, a 4-wheeler for summer transport, and a snow machine for winter transport of the trash bins to the village dump site. Their vendor was Chris Marshall at Tok Welding and Fabrication, who designed the bins and

added a couple innovations to make the collection technician's job easier. Chris was actually able to fabricate everything and drive the equipment down to Anchorage in time for the summer barge!

This year, at least 10 communities will be awarded up to \$80,000 for each RurAL CAP Solid Waste grant. This program will end after next year, so now is the time to apply. The deadline is



Scammon's Burnbox

November 22, 2013. If you have a good idea to improve solid waste in your community, your idea is likely eligible. To find out and confirm that your village is eligible, contact Eric Milliken, Solid Waste Management Project Coordinator. Phone: (907)

865-7360 / (800) 478-7227 x7360 emilliken@ruralcap.com

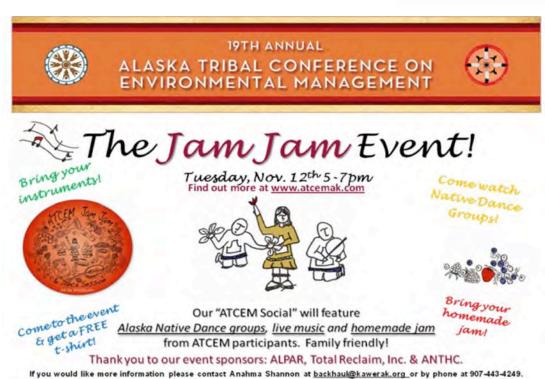
Chris also brought down to the barge the burnbox that Native Village of Scammon Bay purchased through their



Chris waits to load up the Northland Barge.

USDA Water and Waste Grant. The community was awarded \$102,000.00 to purchase the burnbox, as well as a baler, trash bins, and collection ATV and snow machine to improve the community's landfill. Last year, a second burnbox was purchased by the City of

Scammon Bay to provide the necessary 25% match needed. Due to their population, Scammon needed two burnboxes to operate in parallel, and to provide flexibility in loading/storing trash on days that burning is not recommended or too difficult. Zender Environmental provides free technical assistance putting together an application packet for this grant program. For more information and to submit a technical assistance request, visit our website at: http://zendergroup.org/sw.html or call Simone at 341-3279. ssebalo@zendergroup.org



CULTURE CORNER

What are Yup'ik Values?

A person's principles or standards of behavior; one's judgment of what is important in life, which are: love for children, respect for others, learn from elders, sharing, humility, hard work, spirituality, cooperation, family roles, knowledge of language, hunter success, domestic skills, avoid conflict, humor, respect for nature, and respect for land.

How do we improve or share our values?

The values survive through tradition, through extended families- We retain, teach, and live our way passed through generations. These are held to importance of worth of usefulness in great value.

Definitions from http://ankn.uaf.edu/ancr/Values/yupik.html

Culture Reflections by Staff Writer Evelyn Agnus

Tradition Comes with Seasons



As winter approaches, many families package and store their subsistence for the long cold winter. This summer, one of the young hunters probably caught their first catch, a child taught to gather tundra greens, or learned to clean fish. A part of a traditional cycle on learning to live off the vast tundra is an enriched culture to stay alive. Hunters practice to properly care for their catch. It is believed that a seal recognizes the merits of a hunter, and allows itself to

be killed. All animals are believed to be a cycle of life, and their relationship with their environment returns to the earth with its soul alive. The tradition to be reborn in another generation is the same way Yup'ik people inherit their names from another generation with names being carried on. With winter approaching, families are most predominantly looking to share their gathered subsistence by hosting festivals from the month of Cauyarvik- (November, time of drumming). During the month of drumming, people drum and sing with stories about their catch, happiness, past, and share humor. It

is important to carry on the tradition of Yupik culture through language and togetherness, and the art of music and dance. A child will be recognized for their first catch with a name, and will inherit the gathering within their lifetime.

Like a tradition, gathering and preserving is recognized so that a unique memory is created of the abundance, and that abundance then persists in time. People look after each other in a community. With these important values in heart, a community can strive towards an environmentally clean vision and practice that brings health among neighbors and children. We can apply our ways to specific problems like the household hazardous materials in our homes. These materials include: lead acid batteries, fluorescent light bulbs, ballasts, household batteries, electronics, and white goods. After they are used they must be excluded from the environment to protect community and children. They have strong potential for harm and should be kept separately from trash in the homes - in bags, boxes, or buckets-- and then brought to a staging area that is safely separate from children. They should not end up at the landfill. Just as anything else gathered for subsistence, handling household hazardous wastes can be the next practice to be taught in your household and community. I hope everyone has a safe winter to play out in the snow!

Resource Circle



Get out the popcorn and pop in the movie... or at least click on the webpage link. Zender Environmental Productions Presents Pushing Paper: How to Fill Out Backhaul Forms for Alaska Villages. Fresh from the

International Low Budget Solid Waste Film Festival in Cannes, France (Not really...), this film stars Anahma Shannon and was filmed on location at the 2012 ATCEM by Doug Huntman. The film is about a talented and mysterious regional backhaul coordinator who shows how to fill out all the forms communities need to ship out their hazardous and non-hazardous wastes. Viewers can download a step-by-step handbook of forms and follow along with Anahma. Confused about shipping paperwork? View the film at:

http://www.zendergroup.org/backhaul_videos.html



Ship of paper... Those same forms that we developed with Anahma are available separately at our expanded shipping forms and labels webpage. The forms have sample writing in them and text boxes that describe different steps. You can view them at:

http://www.zendergroup.org/ship_forms.html



Where have you "bin"? What else has our staff been up to? Responding to popular demand from our technical assistance requests...we've got a great expanded and updated document on

recycling bins! Wish you had some recycling bins and curious about where to buy, what types, and funding? See:

http://www.zendergroup.org/docs/Recycling_bins.pdf



Bring RAVEN into your community... Host a local resident as an intern in your office. They get paid \$1200 per month for a full year at 40 hours per week. It's hard, but super rewarding work. Past RAVEN

interns started recycling programs, helped with waste collection, drummed up community support, and worked with youth. Applications are due

November 15th, 2013. If you have an environmental project idea and know a younger, older, or middleage person who is looking to get involved and help their community – be sure to point them to this opportunity. You can contact Charlie Ess, RAVEN

Program Coordinator, 865-7355, cess@ruralcap.com. Or go to http://ruralcap.com/?page_id=1540 for an application and additional information.

Did You Miss the August Tribal Lands
Conference? Read on for the links to the
presentations. We had the opportunity to send a
staff member Jacqueline, who is from Hooper Bay,
to attend the YR 2013 Tribal Lands and
Environmental Forum, hosted by Institute of Tribal
Environmental Professionals (ITEP), and held at
Santa Ana Pueblo. Jacqueline set up an exhibitor
table showcasing the projects that Alaska Tribes
have done through the Community Environmental
Demonstration Project (CEDP) Grant Program, the
success stories of graduates from our Rural Alaska



Jacqueline Showcasing Alaska Projects and Alaska Salmon

Community Environment Job Training (RACEJT) program, and the different activities and plans of Tribes and Cities in improving their solid waste circumstances, with whom we are grateful to work with through our Trainings and Technical Assistance Program. Over 100 different Tribes from across the country attended this conference and all of them were happy to see what the

Alaskan Tribal Peoples were up to.

They especially enjoyed the smoked salmon strips! To Jacqueline's surprise it was the first time that some of the lower-48 Tribal members ever tasted salmon!!! Jacqueline even gave one Tribal member a comforting hug...it seemed so sad to Jacqueline to hear that a person can go all their lives without ever eating salmon. \odot

Breakout Sessions: The sessions were very informative and provided perspectives from Tribal, Federal and State agencies. Topics included:

- Incorporating Performance-Based Solid Waste Management and Triple Bottom Line Analysis to Improve Your Solid Waste Program
- Climate Change Challenges and Success on Tribal Lands
- Tetlin Landfill-Solid Waste in Rural Alaska

Village Spotlight: Huslia Has Game. Barrel Burning Gets Defeated with Strong Community Collection Program.

This issue, we visit Huslia and their efforts to address solid waste and barrel-burning by starting up a trash collection program for their community.

Community background & history

Huslia has a population of 275 residents. Huslia is located on the north bank of the Koyukuk River, about 170 river miles northwest of Galena and 290 air miles west of Fairbanks. It lies within the Koyukuk National Wildlife Refuge. The Koyukon Athabascans lived between the south fork of the Koyukuk River and the Kateel River, and sometimes traded with



Kobuk River Eskimos. Cutoff Trading Post (also called Old Town) was established in the 1920s about 4 miles overland or 16 river miles

from modern Huslia. In 1949, the community moved to the present site. By 1952, families began to live year-round at Huslia.

Solid Waste Problems

Previous to last year in Huslia, most of the community burned their trash in 55-gal drums ("barrel-burning") outside their homes and businesses to reduce their trash volume. Reduced trash volume results in a lower number of trips needed to the landfill - which is pretty distant, and costs folks gas money. But when regular household trash is burned in a barrel or a burnbox, or on the ground, it always emits toxic smoke. When that smoke is generated in town versus the landfill, residents are exposed to breathing that smoke a good deal more — they are closer to the source when they breathe it, and they breathe the smoke more regularly. A study on short-term health related to solid waste practices and conditions was performed in YR 2001 in four rural Alaska Villages. People who barrel-burned their trash were twice as likely to have a cough, from 5 to 17 times more likely to suffer faintness, and 5 to 10 times more likely to experience numbness, than people who didn't burn. The more often people burned,

the more likely they were to get the symptoms. Burning was also associated with increased fever and sore throat.

Beyond dangers in breathing waste smoke, the self-hauling of garbage by Huslia residents to their mostly unmanaged dumpsite also presented concerns. Just visiting a dumpsite presents health risks as well as safety issues. The same YR 2001 study found that *folks who visited their dumps were 2 to 3.7 times more likely to experience faintness, fever, vomiting, stomach pain, ear and eye irritation, headache, and/or numbness.* The more often people visited the dump, the more likely they were to experience the symptoms.

Huslia's Solid Waste Vision

Using a shared community bins system, versus house-to house collection, reduces the labor and operational costs for a collection program. The



Barrel Burning In Town

Huslia
Tribal
Council
(HTC)
wanted to
demonstrate
how a lowcost, shared
trash bin

collection program could reduce barrel burning, by making it more convenient for the community to dispose their trash. Huslia also wanted to show how they could convince the community to pay for the service to make it sustainable. Lastly—they wanted to support local employment and hire a local carpenter to design and build the trash bins they would use.

So IGAP Coordinator Shandara Sam submitted a proposal to the FY2012 Community Environmental Demonstration Project (CEDP) Program, also known as the Alaska Tribal Multi-Media Grant Program. After a full review by the CEDP proposal selection committee, the Huslia Tribal Council was awarded a grant for

\$21, 743.00 to carry out their proposed project. Huslia's approach of public education, and locally-built, lower-cost community bins demonstrates how a more affordable trash collection program can be achieved, and how it can reduce poor in-town practices such as barrel burning. Interested? Read on!



Presenting at a Community Wellness Event

Project Activities

Community
Education &
Involvement
Activities
Taken:
It can be
hard to
convince
households

to pay for a shared waste bin collection system since folks can discard their wastes in open bins without paying anyway (as long as no one sees them).

So Shandara carried out a lot of education at first, and throughout the project. Efforts included speaking about the new collection service at community meetings, developing and posting information flyers, writing and mailing out letters to each household, and announcing the new service at other community gathering times, such as bingo.



Monthly Raffle Poster to Encourage Signup.

They also collaborated with their wellness program with their first presentation carried out with an already planned Community Wellness event. Community involvement activities included door prize incentives for households who paid their collection fees. Shandara also took advantage of informal education opportunities, such as when people would ask questions

about "what's going on" when they would see the trash bins being constructed. They also began working with a local mushing team effort that is intended to get youth involved in healthy activities.





Above: Constructing Bins and Below: Completed Trash Bin

Local hire for locally built trash

bins: The project included a local design for the bins and developing a bin location strategy for optimum use and convenience for service users. Shandara ordered all the lumber and other supplies required to build good durable trash bins. A local carpenter was hired to build the bins. Unlike many villages who

have portable smaller bins, Huslia's bin design is a walk-in caged design where residents can drop off their trash safely in tied bags. Huslia also included and involved the RuralCap Raven AmeriCorps program and Tribal youth summer job program to assist with the construction and placement of trash bins. A total of 20 trash bins were constructed.

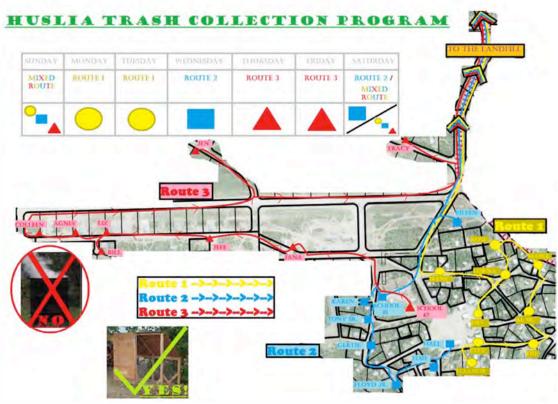
The location of the bins was changed a couple of times as they learned what bins were being most used, and what bins the non-paying customers were using. They also tried to place bins outside Elder's homes to make it convenient for them, and to have them be able to let folks know they should pay for using them. Elders were free. However, after a few months, Elders who wanted to be in the raffle program had to pay a reduced fee rate.

Huslia took advantage of the Rural Cap AmeriCorps and had their intern drive around to collect from the bins. They charge \$10/mo fee for households and \$20 fee for businesses. A \$15 fee is assessed for homes that have businesses in them. Elders pay \$7/mo. Huslia's plan is to use

the collection fees generated to pay for a collector once they don't have an intern. They will also slowly raise the fees as needed to cover the technician's wages. For now the fees cover gas, vehicle and bin maintenance, and participation incentives (Monthly raffle!), and leave a lot leftover for supporting different wellness projects in the community that help with overall environmental awareness.

Results of Project:

For Burning: Shandara



Huslia poster showing trash routes and days overlaying an aerial picture of the village.

conducted two (2) complete burn barrel counts, one at the beginning of the project, prior to starting up the collection and one 11 months later when the trash collection bins were available to residents and business. For each count, they counted how many homes and businesses had barrels and they visually inspected how many were being used. They had remarkable improvements, which is *Less Barrel Burning*.

In April 2012 at the start of the service, 51% of Huslia used barrel burning. By March 2013, only 26% barrel-burned! **That is about half as much smoke being breathed by the community!** Great job Shandara!

Huslia knows it was their collection service that did the trick, because it was mostly the households that were paying for service that didn't have any barrels in-use. Also, for a while in early winter they had no snow, so they had to use their ATV for collection. But they had really cold weather at the same time, so their ATV couldn't start up most of the time, and they had to stop collection. While the collection service was halted, barrel burning increased.

For Collection Service: After 11 months, 60% of households and businesses had signed up and

were paying! This is a great accomplishment. Huslia residents took on the responsibility to pay for that service, and their Environmental Program had an important role in accomplishing that.

Post-Project Update: We have an even better postproject update! It's been one and one-half years since their project started, and six months since it ended. The continued anti-burning education-- together with

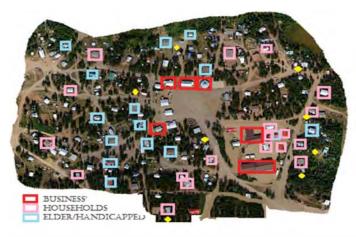


Dedicated ATV and Trailer Purchased with CEDP Award

possibly the households seeing and smelling the difference, and encouraging others to not burn, resulted in a long-term bigger drop in burning even for those who are not participating in the collection service.

Only a few households are left that still burn intown!! Yay!

And in the last few months, the door prizes were stopped and less education effort was taken, mostly



Map showing paying customers helps to determine best bin location and whether it needs to be changed.

due to a busy time period for the Environmental Program. The number of households paying for the service dropped to 44%. That is actually still a great number – it means that if you can afford door prizes and a lot of education for a year, you can get folks so used to the collection service, most of them will keep paying (called a "behavioral change")!

Shandara believes that Huslia can keep increasing that collection number, and she'll be starting new efforts this Fall. To get ready for that, she is working on developing an Excel spreadsheet to keep track of paying customers in a way that makes it easier and less time-consuming.

Lessons Learned

Shandara shared some helpful advice when trying to start up a trash collection service:

- Need to place trash bins most convenient for customers.
- Need to have a backup plan when vehicles break down.
- Need to find innovative and fun ways to encourage service payments.
- Squirrels like to chew into trash bags.
- Ravens are even smarter than you thought possible!
- Orange mesh fencing wrapped several times around the bins didn't really work to keep them out.
- Metal latches and locks work better than wood.
- Need to keep trying new ways to get folks to sign up. Signups keep increasing if you keep trying new things.

- Monthly raffle prizes help a lot to interest folks in trying the service, but prizes can be expensive, so plan for that.
- If door prizes and raffles are stopped, paying customers will drop but still keep up pretty high if the service has been going a while.

Benefits

- After one year, Burn barrel use decreased by 50%! After 1.5 years, barrel use has decreased to just a few households!! Community health is so much better protected!
- 60% of households and businesses were paying for collection service after one year.
- 20 trash bins were built
- Community-service utility established.
- Two local jobs created- one for making the bins and one for trash collection
- Having the waste technician unload wastes at the dump instead of residents allows a better organized site that requires less management.
- Gas and maintenance costs are covered and money left over goes to environmental wellness activities that in turn encourage the community to participate in the service.

For more details on the project or just if you want to see a great community education project, please get out the popcorn and view Shandara's awesome music video! The video tells this project from the perspective of improving environmental conditions through empowerment of community members: http://www.youtube.com/watch?v=PgBzHl3PAug&feature=youtube

Shandara also presented an impressive Powerpoint Presentation at last year's AFE conference. Click on: http://zendergroup.org/docs/cedp/Husliappt.pdf

For more information on this project, contact:



Shandara at a community event

Shandara Sam Huslia Tribal Council P.O. Box 70 Huslia, AK 99746 (907) 829-2269 Email:

shandarasam@yahoo.com

To see other available resources on collection

Alaska Solid Waste News

Calendar of Events and Deadlines

DATE	EVENT/TRAINING	LOCATION	MORE INFO
Nov 12-15, 2013	Alaska Tribal Conference on Environmental Management (ATCEM)	Anchorage, AK	http://www.atcemak.com/
Nov 12, 2013	EPA's Inaugural Tribal Leaders Listening Session with Administrator Gina McCarthy		Please RSVP by November 11th to Elvira Dixon by email at Dixon.Elvira@epa.gov or by phone
Nov 13, 2013	5th Annual White House Tribal Nations Summit	Washington, DC	http://www.whitehouse.gov/webfo rm/2013-White-House-Tribal- Nations-Conference
Dec 2-6, 2013	BIA Tribal Providers Conference	Anchorage, AK	http://biaprovidersconference.com/
December 9-13, 2013	Zender Combined Integrated Solid Waste Management Plan Training and Sustainable Solid Waste	Anchorage, AK	www.zendergroup.org/sw.html
Feb 3-7, 2014	Alaska Forum on the Environment	Anchorage, AK	http://akforum.com
March 18-20, 2014	Rural Alaska Landfill Operator (RALO) Training	Anchorage, AK	http://akforum.com/training.html
April 15-17, 2014	Rural Alaska Landfill Operator (RALO) Training	Anchorage, AK	http://akforum.com/training.html

For more details of the events/trainings listed here, and for additional trainings, events, and funding announcements, go to: http://www.zendergroup.org/docs/Calendar_Oct_2013.doc.

FUNDING ANNOUNCEMENTS & DEADLINES

AmeriCorps BIRCH and RAVEN Applications
Deadline: Nov 15, 2013 Contact Charlie Ess at
RurAL CAP at 1-800-478-7227 extension 7355
or cess@ruralcap.com

RurAL CAP Solid Waste Management Grants Deadline: Nov 22, 2013

www.ruralcap.com/publications/applications/comm dev/Solid%20Waste%20Improvement%20RFP.pdf

BIA Tribal Climate Adaptation Grants

Deadline: November 29, 2013 Email climate-adaptation-grant-info@bia.gov

Wells Fargo and the National Fish and Wildlife Foundation Environmental Solutions for Communities Deadline: Dec 16, 2013 http://www.nfwf.org/environmentalsolutions /Pages/2014rfp.aspx

Alaska Community Development Block Grant
Deadline: Dec 6, 2013

commerce.alaska.gov/dnn/dcra/GrantsSectio n/CommunityDevelopmentBlockGrants.aspx

DEC Brownfield Cleanup and Assessment

Due: Dec 18, 2013

dec.alaska.gov/spar/csp/brownfields.htm#assess

Huslia Continued From Page 8...

programs and user fees, go to www.zendergroup.org/collection.html. To view other CEDP Projects that might help your community address solid waste issue visit our website at www.zendergroup.org/cedp.html. The Request for Proposals for the 2014 CEDP/Multi-Media Program should be out by mid-November. For more information, visit the website above, or contact Jacqueline Shirley at jshirley@zendergroup.org, Phone: 952-9973.

Resource Circle Continued From Page 4...

- Creating Tribal Climate Change Adaptation Plans
- Grant Work as Guide to Developing a Site Response

To see all the presentations go to: www4.nau.edu/itep/conferences/confr_tlf13_pres.asp

Fall Elder Wisdom:

All our cultures have unique values. Alaska Native cultures have many values in common too. According to Native Knowledge Network at http://www.ankn.uaf.edu/ANCR/Values/index.html, these are:

- 1. Show Respect to Others Each Person Has a Special Gift
- 2. Share what you have Giving Makes You Richer
- 3. Know Who You Are You Are a Reflection on Your Family
- 4. Accept What Life Brings You Cannot Control Many Things
- 5. Have Patience Some Things Cannot Be Rushed
- 6. See Connections All Things Are Related
- 7. Take Care of Others You Cannot Live without Them
- 8. Honor Your Elders They Show You the Way in Life
- 9. Pray for Guidance Many Things Are Not Known



Thank you USDA! This material is based upon work supported under a grant by the Utilities Programs, USDA. Any opinions, findings, and conclusions or recommendations expressed in this material are solely the responsibility of the authors and do not necessarily represent the official views of the Utilities Programs.

The mission of Zender Environmental Health and Research Group, a non-profit 501(c)3 organization, is to assist underserved communities in developing programmatic capacity and community resiliency in environmental health issues. Visit us on the web at www.zendergroup.org

ZENDER ENVIRONMENTAL HEALTH AND RESEARCH GROUP

